

[54] **COMPUTER DATA ENTRY METHOD AND APPARATUS**

[75] Inventors: William J. Curtin; Nora Curtin; Stephen H. Soto, all of Madison, Wis.

[73] Assignee: Amtelco, McFarland, Wis.

[21] Appl. No.: 757,020

[22] Filed: Jul. 19, 1985

[51] Int. Cl.<sup>4</sup> ..... H04M 11/00

[52] U.S. Cl. .... 379/97; 379/93; 379/96; 340/365 R

[58] Field of Search ..... 179/2 A, 2 DP, 90 AN, 179/81 C, 84 L; 340/365 R, 756; 379/97, 93, 94, 95, 96, 98

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

3,647,973	3/1972	James et al. ....	179/2 DP
3,772,597	11/1973	Stover .	
3,870,821	3/1975	Steury .....	179/2 DP
3,967,273	6/1976	Knowlton .	
4,005,388	1/1977	Morley et al. .	
4,012,599	3/1977	Meyer .....	179/84 UF
4,029,915	6/1977	Ojima .	
4,124,843	11/1978	Bramson et al. .	
4,201,489	5/1980	Zapp .	
4,202,038	5/1980	Petersson .	
4,304,968	12/1981	Klausner et al. ....	179/6.02
4,323,893	4/1982	Ypsilantis .....	340/756
4,340,887	7/1982	Dias, II .	
4,385,291	5/1983	Piguet .	
4,426,555	1/1984	Underkoffler .....	179/84 L
4,440,977	4/1984	Pao et al. ....	179/2 DP
4,449,839	5/1984	Bleuer .	
4,458,243	7/1984	Sado et al. ....	340/756
4,481,508	11/1984	Kamei et al. .	
4,486,741	12/1984	Nozawa et al. .	
4,532,378	7/1985	Nakayama et al. ....	179/2 DP
4,585,908	4/1986	Smith .....	379/96
4,649,563	3/1987	Riskin .....	379/97
4,650,927	3/1987	James .....	379/97 X
4,658,417	4/1987	Hashimoto et al. ....	379/97
4,674,112	6/1987	Koncraske et al. ....	379/97 X
4,677,659	6/1987	Dargon .....	379/97

**OTHER PUBLICATIONS**

Luff et al., "Dial Your Number in Lights", Telesis, vol. 4, No. 8, pp. 241-246, Oct. 1976.

Primary Examiner—Jin F. Ng

Assistant Examiner—Matthew E. Connors

Attorney, Agent, or Firm—Lowe, Price, LeBlanc, Becker & Shur

[57] **ABSTRACT**

A method and apparatus for entering data into a computer including an abbreviated keyboard wherein each key represents a plurality of characters. Depression of a key of the keyboard causes the generation and transmission of a first electronic signal to a computer. The computer receives the signal and according to a predetermined algorithm, generates a best guess of which one of the plurality of alphanumeric characters represented by the key and signal sent to the computer is desired to be ultimately entered into the computer. A second electronic signal is generated by the computer and transmitted to a display to cause the display to indicate the guess. By subsequent stroke or strokes of the keyboard, the guess is either selected if correct, or if incorrect changed until the correct alphanumeric character is guessed.

The computer programmed with the algorithm for making the guesses may be remote to the keyboard or contain within the keyboard such as by the incorporation of an appropriate microchip. If remote, the computer may be the same computer to which data will be transferred or may be an associated apparatus. Such associated apparatus may include display means for displaying the guess.

In one embodiment the keyboard and display means are integral with a telephone. A secondary display means is provided to show an accumulation of characters previously transmitted, or accumulated in buffer for subsequent transmission.

**20 Claims, 2 Drawing Sheets**

